



Academic publishing: today and tomorrow

Biblioteek- en Inligtingsdiens

Library and Information Service

UNIVERSITEIT • STELLENBOSCH • UNIVERSITY



Presented by:

Tony Roche, Publishing Director, Social Sciences

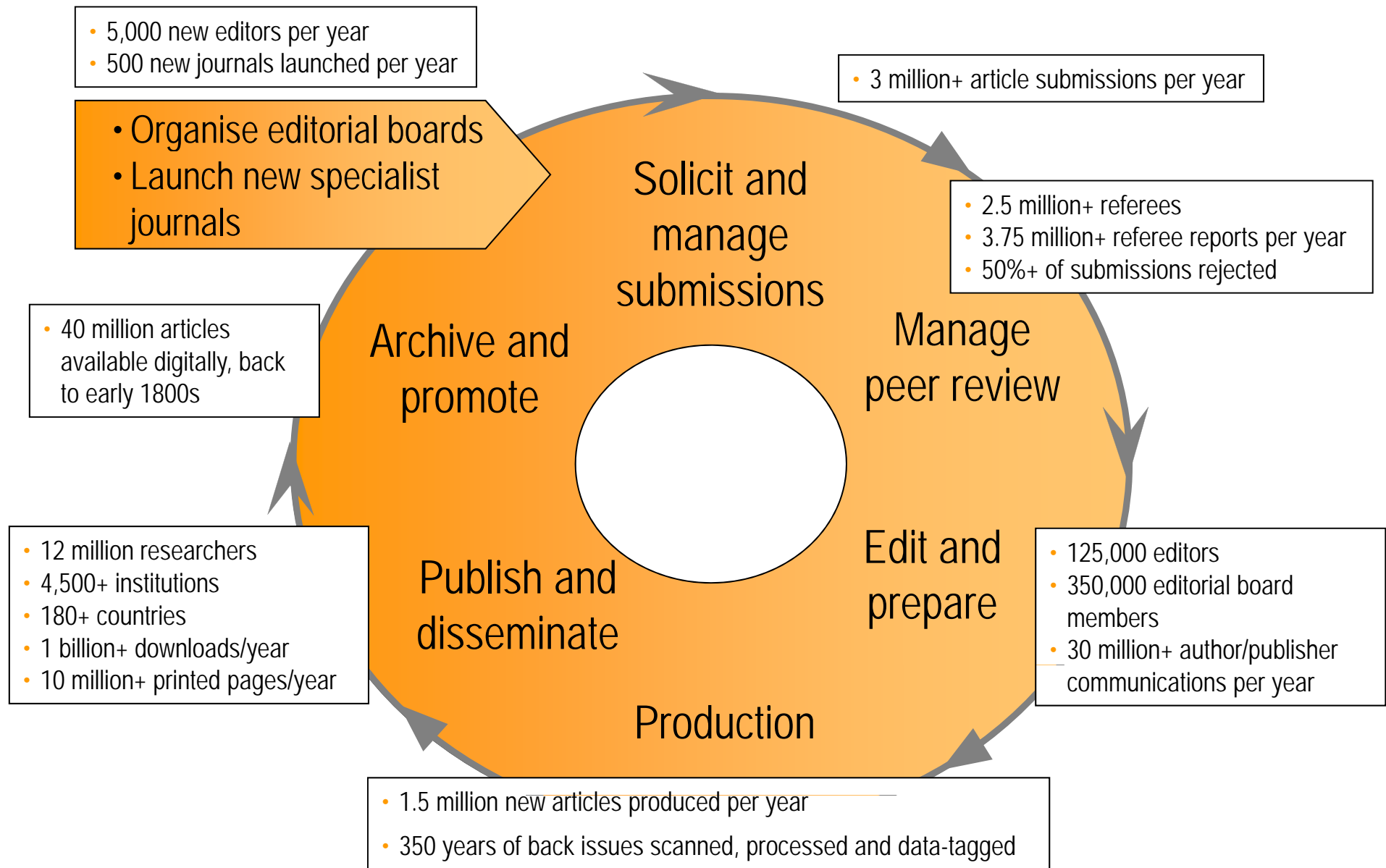
10th May, 2011

| Agenda

- Universal access, quality and sustainability
- Emerging publication themes
- What might the future look like?



What do journal publishers do today?



Note: industry estimates based on known numbers for a subset of the industry that are then scaled to 100% based on the article share of the known subset.

Elsevier is committed to universal access, quality, and sustainability

1. Universal Access

- We exist to disseminate information
- We will identify where remaining gaps exist and find viable mechanisms to close them

2. Quality

- Peer review provides essential quality controls
- We will invest to innovate in technologies that increase researchers' productivity

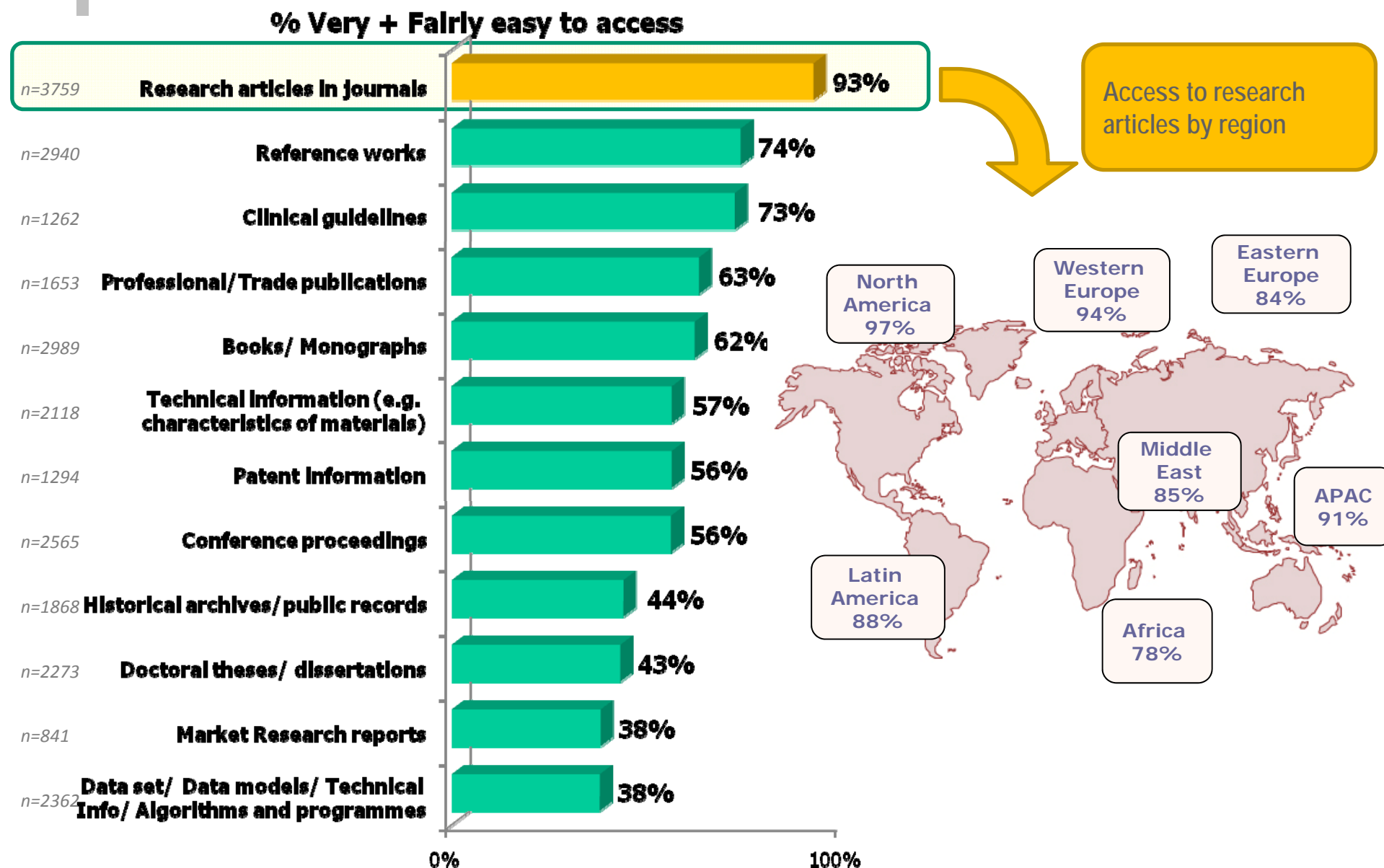
3. Sustainability

- Journal publishers invest heavily to deliver a well-functioning communications system upon which society depends
- Access and dissemination mechanisms must ensure that these investments can be recovered.
- System must also be sustainable for those who fund it therefore we aim to increase efficiency and value-for-money

We support all mechanisms to achieve sustainable universal access to quality content

Where are we today? Access:

Global Study - Phase 1



Universal Access is More than Just “Open Access”

Open Access

- Author Pays
- Delayed Access
- Manuscript Posting
- Sponsored access

Information Philanthropy

- Patient Inform
- Research 4 Life

Transactions

- Pay Per View
- Corporate Access
- Application Marketplace

Subscriptions

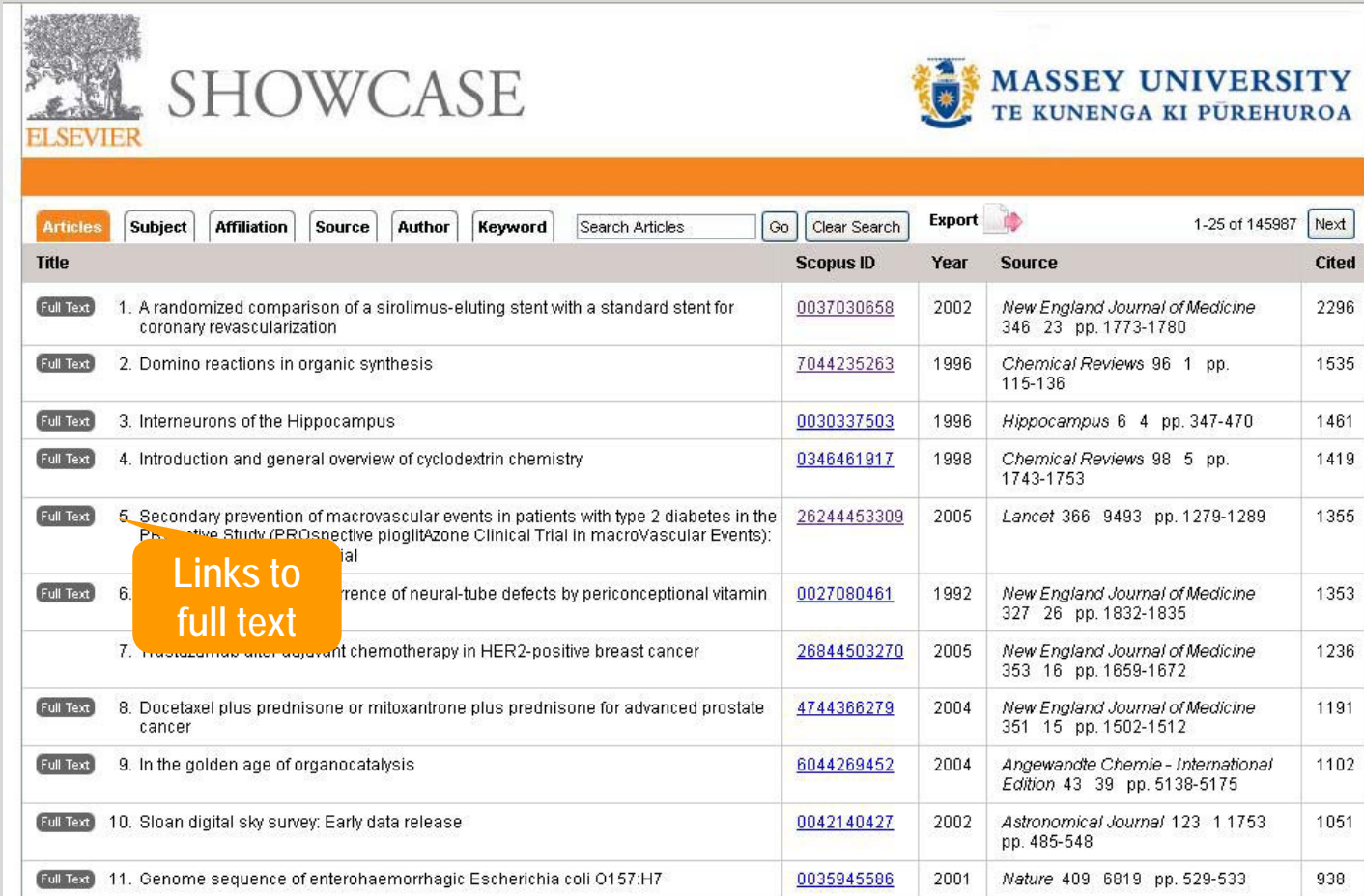
- Freedom Collections
- Subject Collections
- Walk-in Policy

Lending & Rental Options

- DeepDyve
- ILL, Document Delivery

Different scientific communities have different requirements. We're experimenting in all areas of Universal Access to see what offers sustainable options while maintaining the quality provided by peer review

Future approach for Manuscript Posting?



The screenshot shows the SHOWCASE Massey University website. The header includes the Elsevier logo and the Massey University logo (Te Kūhanga ki Pūrehuroa). Below the header is a navigation bar with tabs for Articles, Subject, Affiliation, Source, Author, and Keyword. A search bar is present with a 'Go' button and a 'Clear Search' button. An 'Export' button is also visible. The main content area displays a list of 11 articles, each with a 'Full Text' link, a title, a Scopus ID, a year, a source, and a cited count. The articles are numbered 1 through 11.

Title	Scopus ID	Year	Source	Cited
1. A randomized comparison of a sirolimus-eluting stent with a standard stent for coronary revascularization	0037030658	2002	<i>New England Journal of Medicine</i> 346 23 pp. 1773-1780	2296
2. Domino reactions in organic synthesis	7044235263	1996	<i>Chemical Reviews</i> 96 1 pp. 115-136	1535
3. Interneurons of the Hippocampus	0030337503	1996	<i>Hippocampus</i> 6 4 pp. 347-470	1461
4. Introduction and general overview of cyclodextrin chemistry	0346461917	1998	<i>Chemical Reviews</i> 98 5 pp. 1743-1753	1419
5. Secondary prevention of macrovascular events in patients with type 2 diabetes in the Prospective pioglitazone Clinical Trial in macroVascular Events (PROGRESS)	26244453309	2005	<i>Lancet</i> 366 9493 pp. 1279-1289	1355
6. Prevention of neural-tube defects by periconceptional vitamin	0027080461	1992	<i>New England Journal of Medicine</i> 327 26 pp. 1832-1835	1353
7. Trastuzumab after adjuvant chemotherapy in HER2-positive breast cancer	26844503270	2005	<i>New England Journal of Medicine</i> 353 16 pp. 1659-1672	1236
8. Docetaxel plus prednisone or mitoxantrone plus prednisone for advanced prostate cancer	4744366279	2004	<i>New England Journal of Medicine</i> 351 15 pp. 1502-1512	1191
9. In the golden age of organocatalysis	6044269452	2004	<i>Angewandte Chemie - International Edition</i> 43 39 pp. 5138-5175	1102
10. Sloan digital sky survey: Early data release	0042140427	2002	<i>Astronomical Journal</i> 123 1 1753 pp. 485-548	1051
11. Genome sequence of enterohaemorrhagic Escherichia coli O157:H7	0035945506	2001	<i>Nature</i> 409 6819 pp. 529-533	930

Scopus
cited by

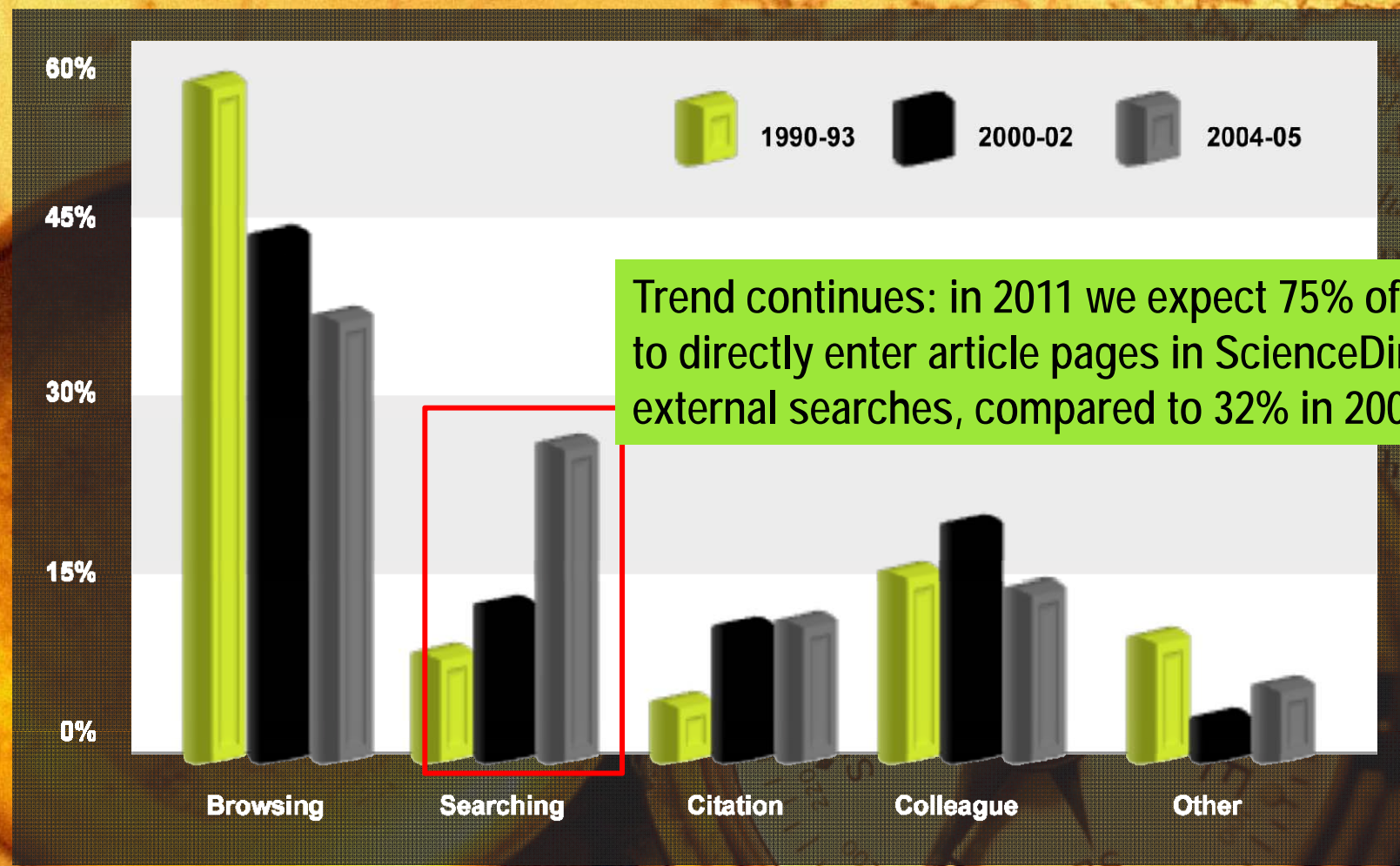
Links to
full text

- Provides list of institution output
 - Metdata (Scopus)
 - Cited by counts
- Links to the full text on ScienceDirect and other publisher platforms

| Emerging publication themes

- 1. Emphasis will continue to shift from journal to article





Trend continues: in 2011 we expect 75% of our users to directly enter article pages in ScienceDirect from external searches, compared to 32% in 2004

Changing user behavior

Methods used by university faculty to locate articles

(Source: Tenopir 2007)



'People's expectations have grown. Ten years ago, when you looked for something and found it you'd be really impressed. **Now when you don't immediately find exactly what you want, you think something's broken.'**

Udi Manber, VP Engineering, Google



2. Platforms will get more intelligent and the user experience richer





Application Marketplace

Search apps

Search

Search Tips

Home

Shop

All Products



SciVerse



ScienceDirect

SCOPUS

Category

All Apps (174)

Articles (24)
Search (34)
Graphs & Charts (42)
Information & News (17)
Visualization (45)
New and Updated (12)

Price

All Prices

Free (35)
Under \$25 (61)
\$25 to \$50 (42)
\$50 to \$100 (29)
\$100 and Above (7)

Recently Viewed

► Gene View
► SciFacts
► Chart Viewer
► Atomic Zoom 3D

Newsletter & Updates

Sign up for app news and get notified whenever new apps or updates are released.

Enter email address

Submit



Sort by: Most Popular

Page 1 of 12



Gene View

★★★★★

Editors Choice

\$15.00

Add

Get Trial

Gene View is an application that allows the visualization of genetic sequence data. Visualize genetic sequence data taken from the GenBank of NIH as found in articles and your search results. This app has an easy to use Graphical User Interface providing a multi-colored overview panel with zoom functionality. [More >](#)



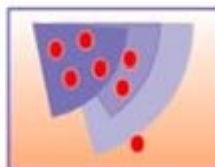
Protein Explorer

★★★★★

\$25.00

X Remove

View interactive protein structures and custom views in results and articles instantly. Two dimensional and three dimensional information of all proteins and their shapes. [More >](#)



Research Trends

★★★★☆

\$20.00

Add

Get Trial

Review research trending for specific research to make informed decisions and deliver results, especially with grants requests. [More >](#)



Article Notes

★★★★☆

Free

Add

Append notes to your articles and retrieve them whenever you view the article. Assist in collecting and writing information. [More >](#)



Author Finder

★★★★☆

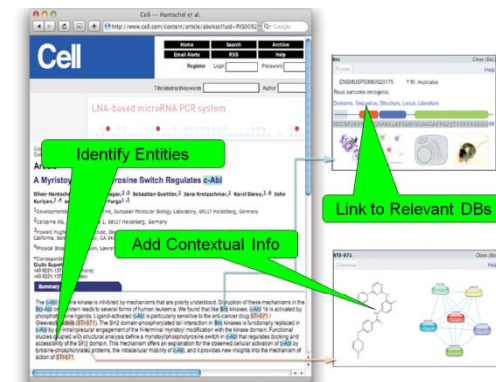
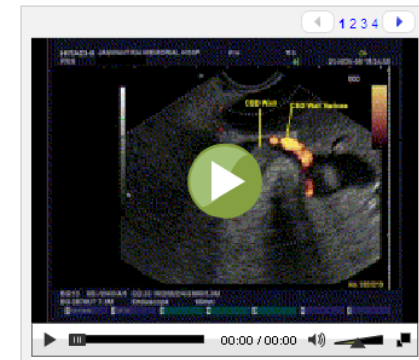
\$35.00

Add

Helps you locate and contact authors displayed in search results and articles. This is especially useful for people with common names. [More >](#)

3. The “article of the future”

- Article didn't change (much) in 350 years
- Print-based (although now in PDF form)
- Linear reading (top-left to bottom-right)
- Some changes happened though:
 - Internal navigation
 - Reference linking
 - Supplementary data files
- Small-scale developments:
 - Inline video, Semantic mark-up, Data manipulation



Cell
Article Prototype #1
The Journal of
Not for review
Article Type
Article Type

May 7, 2008 • Volume 132, Issue 5 • pp. 642–654 • DOI:10.1016/j.cell.2008.04.018

A Dynamic Pathway for Calcium-Independent Activation of CaMKII by Methionine Oxidation

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[Abstract](#) [Introduction](#) [Results](#) [Discussion](#) [Experimental Procedures](#) [Figure 1–5](#) [References \(35\)](#) [Authors](#) [Comments \(2\)](#) [Acknowledgments](#)

Article Highlights

- Oxidation of methionine residues activates CaMKII
- Angiotensin II induces CaMKII oxidation leading to cardiomyocyte death
- CaMKII methionine oxidation is reversed by Mark
- Oxidized CaMKII oxidation impairs heart function and worsens ischemic injury

Author Interview

[Interview with Mark E. Anderson](#)

Abstract

Calcium-independent (Ca^{2+} -Ca²⁺-independent) protein kinase II (CaMKII) is a key component of cellular Ca^{2+} signaling and is a fundamental regulator of cardiac function. CaMKII was identified over 30 years ago by activation dependence on Ca^{2+} -Ca²⁺, but recent evidence shows that CaMKII activity is also enhanced by protein oxidation. Here we show that oxidation of paired regulatory domain methionine residues sustains CaMKII activity in the absence of Ca^{2+} -Ca²⁺. CaMKII activated by angiotensin II (AngII)-induced oxidation, leading to apoptosis in cardiomyocytes both *in vitro* and *in vivo*. CaMKII oxidation is reversed by methionine sulfide reductase A (Mark), and Mark-/- mice show exaggerated CaMKII oxidation and myocardial apoptosis, impaired cardiac function, and increased mortality after myocardial infarction. Our data demonstrate a dynamic mechanism for CaMKII activation by oxidation and highlight the critical importance of oxidation-dependent CaMKII activation to heart and ischemic myocardial apoptosis.

[Switch Position](#)

[illegible]

So what might the future look like?

- Academic publishing has a future, as the (digital) world continues to change around us....
- Scholarly behavior is remarkably unchanged *but* is altering in some subject areas
- Technology provides new tools, so far for existing purposes (registration, certification, dissemination, archive) *but* technology affects attitudes to information ("web=free?")
- Business models will be viable *if* there is continuing respect for IP/copyright and conditions exist that make publishing economic

Predicting the future...

"There will never be a mass market for motor cars — about 1,000 in Europe — because that is the limit on the number of chauffeurs available!" — Gottlieb Daimler, inventor of the gasoline-powered automobile, 1889



Courtesy:

stm